

Re:Port

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Improved Launch! makes loading easy

One program that was featured in our last issue, as a small utility file, has developed quite a following. "Launch!" has found its way onto quite a few Portfolios, but the version that we released last time was a demo with limitations.

Now, here's the next version of Launch, exclusive to Re:Port readers. It has improvements in the way files are displayed and run, and it handles more filenames.

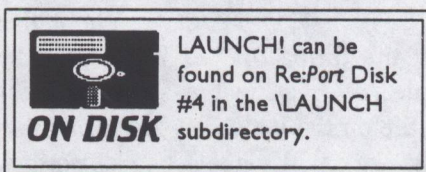
For those of you who haven't tried Launch yet, here's a brief description of what it can do: It allows you to point with the cursor at any filename, and your application and its data file are loaded. You can point at a .TXT file, and the editor will load with it ready to edit.

Launch also launches .EXE and .COM program files. In addition, you can launch .PGC graphics files (Launch displays these by itself, with no need to have a viewer application on the Portfolio).

In other words, Launch is like the File Manager program that came with your Port, except it is smaller, faster, more attractive, and displays graphics as well!

To use Launch, you must copy two programs from Re:Port Disk #4 onto your Portfolio (they are both under the \LAUNCH directory on Disk #4): LAUNCH.BAT and LA.EXE.

LAUNCH.BAT is a batch file that



handles program loading, and LA.EXE is a program that handles putting up the menu of filenames.

To run the program, type LAUNCH. You will be offered a menu of filenames, each under a heading such as .EXE, .COM, or .TXT. To run the program (or to load the data file into its application), put the cursor on the file and press ENTER.

If you have too many filenames to fit on one screen, the menu can "scroll down" to offer more filenames. Press the down arrow key to do this.

When you are finished using whatever program you launched, you will return to the Launch menu. At this point, you may choose another filename. If you wish to leave Launch, however, press the ESC key.

Let us know if there is anything else we can add to the program, or to any of our programs. We decide what to put into Re:Port based on what users tell us they want, and Launch has been a favorite.

What's Inside

- Re:Port changes the way files are sorted to make it easier to find the program you want.

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- In Industry News, 512K cards are available, and you can even trade in your old memory cards to get one.

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- Two more featured programs in this issue. Battery Monitor warns you before your batteries run down, and Jeopardy Helper lets you play along with Alex.

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- Find out who won a Terminator 2 card, and find out how to win a copy of Instant Speller. Also, an Instant Speller review.

Pages 6 and 11

From the Editor

Re:Port makes understanding disk files easier

I think we have a great issue in store for you this time. The issue includes three great exclusive programs for Re:Port readers, Launch, Battery Monitor, and Jeopardy Helper.

I appreciate all the letters and email messages that Re:Port receives every day. Please keep them coming!

In response to some of the comments we have been receiving, Re:Port will make some changes beginning with this issue.

A big complaint has been that the format of the diskettes are confusing. Some people have been unable to decipher the meanings of each file on the included diskettes. Therefore, beginning now, we will place a file in the main directory of the disk called FILES.TXT. You may read this file using any file viewer (including the Portfolio's built-in editor). It will include a one-line description of each file on the disk.

If the file is one that is necessary to put on your Portfolio in order to get the main program to run, it will be marked with an asterisk (*). If the file is not marked with an asterisk, then the file does not need to be on the Portfolio in order for the selection to run.

For example:

* LA.EXE : The main file for the Launch program

* LAUNCH.BAT : Batch file for use with the Launch program.

EXAMPLE.TXT: A file that may be read with the built-in editor

In the above example, LA.EXE and LAUNCH.BAT would be files for use on the Portfolio.

In order to make the files even more understandable, we will no longer include the source code files for the programs in the same directory as the programs. Instead, all source code files will be under the directory \SOURCE. Our source code is written in Turbo Pascal 6.0. Please write for other Pascal formats. (Note: If you're not a programmer and have no interest in how the programs work internally, you can ignore the \SOURCE directory altogether!).

To further help you in figuring out what files do what, the following extensions will be used:

.EXE = program

.COM = program

.BAT = batch file (runs programs)

.ADR = address book file

.WKS = worksheet file

.TXT = text file, to be read with the built-in editor or any file viewer.

.BAS = source code file for PBASIC or PowerBASIC

.PAS = source code file for Turbo Pascal

.TPU = unit file for Turbo Pascal 6.0

I hope these changes will benefit all of our readers. Please don't hesitate to let me know if you think there should be further changes.

In other news, our promotion continues: Get a friend to subscribe and receive a \$5 Re:Port gift certificate! Make sure that your friend includes his IBM PC disk size (Mac disks are an extra \$20 a year). Also, be sure your friend mentions your name.

Included on your Re:Port Disk #4 is a copy of 60View, just to make sure that everyone who has subscribed has a copy of it. The files are not new. If you already have 60View, you don't need to copy these files to your Portfolio. The documentation for 60View is included in the file \60VIEW\60VIEW.TXT. Enjoy!

Back issues of Re:Port are still available. Back issues are \$10 each, and you may order them from Re:Port, 1618 S. Beech Ct., Broken Arrow, OK 74012.

To help you determine what issues you need from the ones you may have missed, here's a description of the contents of our first three issues:

ISSUE #1: PBASIC programming, editorial on non-disclosure, DOS tips, macro program for the built-in editor, check-balancing worksheet, using the address book as a study partner, industry news.

ISSUE #2: Spell checker for the built-in editor, stupid Port tricks, industry news, PBASIC 4.9, Portfolio online support, backup utility, book review, PBASIC vs. PowerBASIC review, how to hide files, reader mail.

ISSUE #3: Reviews of Finance, Terminator 2, PowerBASIC, and Business Contacts and Information Manager, how to run .HOO files, industry news, check-book utility, settings utility, piano program, online services (including quite a few small utility programs!).

Thanks again for your continuing support; we look forward to hearing from all of you.

Industry News

512K cards, other products available

512K CARDS AND MORE

Finally, storage greater than 128K built especially for the Portfolio is here! Ultrasoft Innovations of Montreal, Canada, is offering 512K cards for the Portfolio, and you can even trade in your old 128K cards to get one.

The 512K cards are imported from Distributed Information Processing in England. They are module cards, which means that the card protrudes from the side of the Portfolio rather than going in flush with the drive as regular memory cards do. However, Ronald Eckerlin, assistant manager of Ultrasoft, says that regular-sized cards are in the works.

The 512K cards cost \$499.99 US. Ultrasoft will allow you to trade in your memory cards to help bring the cost down. For instance, they will trade in up to two 128K cards for \$124.99 US each.

Contact Ultrasoft for more information on ordering or trading in. President Richard Eckerlin can be reached at (514) 487-9293. Or, write to them at PO Box 247, Champlin, NY 12919 USA. They ship through their New York address, so you don't have to pay duty or customs fees.

Ultrasoft is "definitely dedicated to supporting this machine no matter what," Ronald Eckerlin says. The company imports many of the products that are available from DIP in England. They also plan to begin working on a 512K internal memory upgrade, and they sell Mac transfer software, Portfolio applications software for the PC, and a deluxe carrying case. Call or write the company for details.

HYPERTEXT FOR THE PORTFOLIO

Kent Peterson is still working on his hypertext authoring system for palmtops and the PC. Of course, a version will run on the Portfolio!

Called HTX, the program will include hot-keys to the Portfolio's built-in applications, a mini-manual, and a run-time version that you may freely distribute to others, so your hypertext presentation can run on other machines.

Peterson plans to release a demo version soon; Re:Port will publish it on a future disk.

As we said in Issue #2, Peterson is offering the HTX program for \$55.25 to Re:Port subscribers. The program comes on an IBM PC diskette. Send your orders to Re:Port, and we'll forward them. (Re:Port will upgrade you to a Macintosh disk for another \$10).

ATTENTION ALL PORTS

The newest APB (Accessories and Peripherals Bulletin) is available for the Portfolio. This is Atari's official list of what's available for the Portfolio and where to get it. It is well worth the \$1 cost.

To get it, write to Don Thomas, Atari Corp., 1196 Borregas Avenue, Sunnyvale, CA 94089. Be sure to mention that you are a Re:Port subscriber!

GETTING GRAPHIC

If you have a company logo or other art element you wish to have scanned and edited as a Portfolio graphics screen for your batch files, send a business card, letterhead or other art element with \$10 to: Artisan Software, P.O. Box 849, Manteca, CA 95336.

Custom screens make a great impression as gifts, company exposure, program titles, reminders and more. If you wish to have an animation of your logo, add \$50 (\$60 total). Animations will comprise at least 8 separate frames.

Please include \$1.50 for return shipping. You will receive a PC 3.5" disk with your artwork as well as a library of other animations and images for the Portfolio.

HYPERLIST HOLDUPS

We were hoping to ship Hyperlist with the newsletter to those of you who have ordered the outliner and data organizer program; unfortunately, Atari is still having holdups getting the manual printed. The word is, though, that it will be available by the time Re:Port reaches you.

We will ship the program immediately, the day it comes into the office. As a token of our appreciation for waiting patiently to receive the program, Re:Port will include a \$5 gift certificate to those who have been waiting for Hyperlist for so long.

For everyone else, we will review the program in our next issue. If you are sure that you want it now, however, you can order it for only \$40.96. The Hyperlist program will be sent to you on a ROM card.

PBASIC

Tips on converting GW-BASIC

By BJ Gleason

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PBASIC strives for GWBASIC compatibility, but falls a little short at times. This is due, in part, to the implementation of PBASIC. PBASIC was written in Turbo C 2.0 by Borland. It uses many of the standard library functions provided to implement the BASIC statements and functions.

Because of this, and other implementation decisions, there are slight incompatibilities between the two versions of the popular BASIC language. In this column, I will explain what these differences are, and how to convert GWBASIC program to PBASIC.

FILE COMPATIBILITY

GWBASIC tokenizes the BASIC statements as they are typed in. This is also how it saves the program to the disk. This is not much of a problem for GWBASIC, since it contains its own internal editor. PBASIC uses the Portfolio's internal editor, which requires ASCII text. You must save a GWBASIC file with the command:

SAVE "filename.BAS",A

for it to be saved in the non-tokenized, ASCII format.

LINE NUMBERS

When you refer to a line number in PBASIC, it is looked up in an unsorted array of line numbers. This array contains a pointer to the line. This is a static array, limited to 100 entries. In short, you are only allowed to have 100 line numbers in PBASIC programs. Because PBASIC uses a full screen editor, line numbers are not required on each line. GWBASIC requires a line number on each line. For short programs, this is not a problem. For programs of more than 100 lines, you will have to start removing line numbers from lines that are not targets of a GOTO, GOSUB or a DATA statement.

To help in this task, the program SPB is included with PBASIC to remove unneeded spaces, remarks, and line numbers from a program. This is an important tool for the conversion process.

DATA STATEMENTS

DATA statements in PBASIC MUST have a line number. In the pre-processing of the PBASIC program,



ON DISK

Gleason on PBASIC

PBASIC can be found on Re:Port Disk #4 in the \PBASIC subdirectory.

the line numbers are stored in an array. Any line with a line number is then checked to see if it is a DATA statement, in which case, a flag is set for that line number. This allows PBASIC to find the DATA statements quickly. Another difference in PBASIC is that all strings in DATA statements must be enclosed in quotes.

GWBASIC: 100 DATA hello, "my name is", bob, 17

PBASIC: 100 DATA "hello", "my name is", "bob", 17

FUNCTION KEYS

PBASIC implements strings using C's string library. This is a ASCIIZ [0] string library. GWBASIC uses a length byte at the beginning of the string to determine it's length. The main drawback is that PBASIC strings can not contain an ASCII 0. For most programs, this is not a problem. However, one place there this fails is in reading in function keys in PBASIC. When a function key is pressed in GWBASIC, it returns a two character string. The first character being 0, the second indicating the key. For example, the <UP> arrow is 0H. PBASIC also returns the function key as two bytes, but it would return HH. Here is a sample subroutine that would work on either GWBASIC or PBASIC to determine if a function key was pressed:

```
100 A$=INKEY$ : IF A$="" THEN GOTO 100
110 IF LEN(A$)=1 THEN RETURN
120 REM we have a function key
130 F$=MID$(A$,2,1) : REM get the function key
140 RETURN
```

PRINT USING

The field format in PBASIC is based on C's field format. GWBASIC has it's own field format interpreter to handle this. Since C's formatter was already in PBASIC for other functions, USING simply accesses it. While this is a major difference, the field format string in PBASIC much more flexible than that

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PBASIC

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of GWBASIC.

GWBASIC: PRINT USING "####.##";A

PBASIC: PRINT USING "%7.2f";A

See the PBASIC manual or documentation for additional information.

DEFAULT NUMBER FORMAT

The default format for printing number is GWBASIC is to print a SPACE or a MINUS sign, the number, and a trailing SPACE. PBASIC just prints the number, with no trailing or leading spaces. Since this can cause formatting problems, the NUMFMT option is included in PBASIC. To emulate the way GWBASIC prints numbers, add this statement to the beginning of your code:

NUMFMT = "% g "

This will then print the numbers in the same format as GWBASIC. These technique opens up a lot of possibilities for the default numeric printing style. If you want all your numbers displayed in scientific notation, set NUMFMT to "%e". See the PBASIC manual or documentation for additional information.

CONVERTING FROM PBASIC TO GWBASIC

Don't. PBASIC contains many more advanced

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features and functions that GWBASIC. Converting back to GWBASIC would mean you would have to write your own routines to display menus, boxes, windows, error messages, and more.

Worksheet

Use Fn-5, Fn-10 to overcome display shortcomings

One of the biggest complaints about the Portfolio's built-in functions is that the Worksheet display area isn't big enough. Unfortunately, you can't make it any bigger, but there are some tricks to get the most out of the space you have.

The first tip is to hit Fn-5, which removes the border from the screen and gives you access to fully two more rows of worksheet space. You also gain two columns. Not much, but every little bit counts.

Another, perhaps more under-

used, tip is to use the Fn-10 key more effectively (or at all). Pressing Fn-10 "flips" the worksheet between any two points, which can be very useful indeed.

Let's say that you're working on cell G19 of a worksheet, and you need to see what was in cell A1. Don't reach for the cursor keys; simply hit Fn-10. You are automatically returned to the "top" of the worksheet. Hit Fn-10 again, and you're back at the original cell.

You can set the point to which you'll flip the screen at any cell, not just A1. To do that, just go to the cell

you want to be your "anchor" position, then hit the Atari key, press W, then press W again, then press M. That marks the current cell as the one to flip to. Now, whenever you hit Fn-10, the screen will toggle between your current cell and the cell you marked, rather than toggling between your current cell and A1.

By combining the techniques of using Fn-5 and Fn-10, you can get the most out of the limited display space available in the Worksheet application.

Program review

Instant Speller more than a checker

Poor spellers and frustrated crossword puzzle players will love one of the latest Atari releases — Instant Speller (\$34.16 to *Re:Port* subscribers).

The Instant Speller program comes on a ROM card and includes a 100,000-word general dictionary. It also has the ability to create a 5,000-word user dictionary. However, this dictionary must be stored on the C: drive, under the \SYSTEM directory. If you don't have free space on the C: drive, you won't be able to store many (or any) words.

Instant Speller can work in two different modes, each with its own features.

The first mode allows you to enter and correct single words. If you misspell the word that you enter, you can ask for a list of possible correct spellings. This word-by-word checking may not seem very useful, but it has some features that make it invaluable to word-game players.

The spelling checker allows you to enter a partial word, including wildcard characters. It will search the dictionary for any word that matches. The wildcard characters are ? and *, where ? replaces any single character, and * replaces any number of characters.

For example: Searching for W??D will find many words, including wand, ward, we'd, weed, weld, and wend. However, entering W*D finds any word that starts with W and ends with D, such as wobbled, wad, wadded, waddled, waded, and wafered. You may put the ? and * anywhere you wish within the word.

So the next time you're doing a crossword puzzle and you need a five-letter word that starts with S, ends with T, and has an L in the middle, just enter S?L?T. Within seconds, you'll have SPLAT and SPLIT to choose from.

The second mode is perhaps a bit more useful to everyone. It is a spelling checker, similar to the spelling check program offered in Issue #2 of *Re:Port*. It is a .HOO file that runs within the built-in editor.

If you are working on a file in the editor that you are storing on a memory card in the A: drive, save it first, then turn the Portfolio off by pressing Fn-O and then hitting the Fn key again. This turns the Portfolio off but

```
C:\TEST.TXT L:1 C:30 M:39 ~
This select action: nly a *tst.
      ignore
      user dictionary
      edit/exit
      alternatives
      show screen
Thu 27 Feb 92 20:19 INS
```

Instant Speller finds a misspelled word and offers options, after a keypress.

leaves the built-in editor running. You then remove your memory card and insert the Instant Speller card. If you are storing a file on the C: drive, you must go through the same procedure if Instant Speller is not already in the A: drive.

Once Instant Speller is inserted, you press Fn-6 and ENTER. Instant Speller will begin the spelling check at the point where your cursor was last positioned. That's one fault; if you forget to start at the top, Instant Speller won't position the cursor there for you, nor will it offer to start again from the top.

When Instant Speller finds a misspelled word, rather than automatically offering you a menu of choices, it just displays a diamond next to the word and beeps. You must press a key to get a menu to come up, which is a bit of an inconvenience.

The menu allows you to ignore the word if it is spelled correctly but just not in the computer's dictionary, add the word to the user dictionary, exit the spell checker, show alternate words, or show the screen so you can review the word. Unfortunately, the "show screen" function doesn't allow you to return to the menu and keep working on the misspelled word; it moves on to the next misspelled word, if there is one. So the menu can be misleading at points.

Fortunately, creating a user dictionary is simple, as it is just a list of words. You can type in specialized words in the editor and save them as a dictionary, or you can import words from a list on your PC.

Despite some small shortcomings with Instant Speller, this is a very worthwhile utility for the Portfolio, especially considering that it is the only Atari ROM-based software that costs less than \$40. For a low price, you get a powerful speller in a small package.

Featured programs

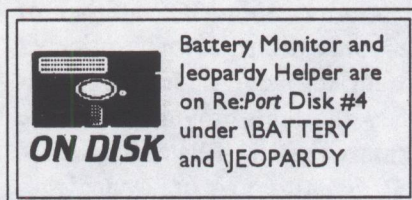
Battery Monitor reminds you to change

If you're like many Portfolio users, you don't think that the low battery warning on the machine is good enough. All of a sudden, you get a warning and the machine shuts down, leaving you to scramble for some double-A batteries.

But now you can use the Re:Port exclusive program Battery Monitor to remind you to change your batteries after a certain amount of time so you need never see the low battery warning again.

Using Battery Monitor is quite simple. The program BAT.EXE needs to be on your Portfolio, preferably on the C: drive. Type BAT and a number to begin.

The number will be the number of hours you want the Portfolio to wait until you should change batter-



ies. For example, BAT 48 will wait 48 hours (two days) then remind you to change your batteries. Actually, you should probably set the machine to wait around seven days before you get the warning. Then, you can change your batteries and keep working safely!

Some important notes:

- Battery Monitor is a TSR (terminate and stay resident) program. That means that it takes up memory in your computer to run. If you can't spare any memory, don't use it.

- Battery Monitor will stop working if you reboot your machine. If you reboot your machine, you must restart Battery Monitor as well.

- Battery Monitor is active, counting the number of hours going by, even when the Portfolio is turned off (when the Port is off, it still uses battery power, just not as much). If your Portfolio is off for much of the time, you'll probably want to set Battery Monitor to a high number.

- Battery Monitor can only be restarted after the machine is rebooted.

Therefore, it is a good idea to reboot your machine (by hitting Ctrl-Alt-Del, or by pressing the button on the bottom of the Port) after you replace your batteries. Then, restart Battery Monitor.

Jeopardy Helper puts you in the game

Have you ever wondered how well you'd do if you competed against the people on Jeopardy. Well, now you can find out!

Jeopardy Helper is a program for those of you who like to play along with the hit TV game show.

To play, put the file JEO.EXE on your Portfolio, and type JEO when the show comes on TV.

When you think you know the question to a Jeopardy answer, hit the number key that corresponds to the dollar value of the answer (for instance, if the answer is worth \$100, hit the 1 key). The Portfolio will "buzz you in," at which point you have to say your question, before

anyone on the show says anything. Be sure to form your response in the form of a question. If your question is correct, hit R; if it is wrong, hit W.

In Double Jeopardy, use the 0 key to buzz in on a \$1000 answer.

If you hit a Daily Double (at Re:Port, we play it correctly; that is, you can't buzz in for a daily double unless you responded correctly to the answer before it), you hit D, then you will be prompted for a wager. Enter the dollar amount of your bet. You do not need to enter the same wager as the TV contestant.

Your wager on a Daily Double is limited only by the amount of money that you have. If you have less than

\$500, you may bet up to \$500. If you have more than \$500, you may bet as much as you have.

For Final Jeopardy, hit the F key. Enter your wager and prepare your question. When the show is over, hit ESC to exit.

Unfortunately, you can't win the actual money. However, there are good points to using the Portfolio to play along. For instance, Jeopardy Helper was written so that you could use the built-in applications while you play. You can use the calculator (Atari-C) to figure out what you need to wager in Final Jeopardy! That's a convenience the contestants on the show don't have.

For Beginners

Get more by dropping File Manager

Re:Port has received many letters from readers who want a more beginner-oriented column. Starting with this issue, we will focus on some of the more basic aspects of the Portfolio so those readers can become Port experts quickly!

Many new users, or people who have never used DOS before, may rely too heavily on the File Manager program that came with the Port.

Although that program is handy, you're paying a high price in memory by using it. If you have tried running programs, such as those that Re:Port offers, and have run into "Out of memory" or "Exec error" messages, then you will want to consider dropping the File Manager.

Also, using File Manager means that you always have the card in the card slot, so you have to turn the Portfolio off and on just to save information to your RAM cards. A better set up would be setting File Manager aside, and keeping your RAM card in the slot all the time.

Quitting the File Manager is as simple as hitting the ESC key and answering with a "D" the choice between "Off" and "DOS." Then remove the File Manager card, and don't ever look back.

Now that you're at DOS, we need to take a look at some of the commands that you'll need to get around.

First, though, some advice: If you mostly used the File Manager just to load your internal applications, you'd be well-advised to try out the Launch program described on page 1 of the newsletter, or just

hit Atari-Z from DOS. Either of these provides a nice menu-oriented system for your internal applications, and both provide more free memory than the File Manager.

Perhaps the most important DOS command for beginners is the DIR command (which stands for Directory). This shows what files you have on the Portfolio. Because of the Portfolio's small screen size, you might want to add what is called a "switch" to the command: /P. This will make the directory display pause after the screen is filled; you just hit a key to continue. So, typing DIR /P will give you a list of the files you have stored on the Portfolio.

You can specify where you want to look by adding the name of the disk drive you want to search. To look at the Port's internal RAM drive, type DIR C: /P ... to look at the directory of your memory card, type DIR A: /P. (Speaking of drive letters, the reason you see a C> or an A> when you're in DOS is that the letter is the name of the current drive, either the internal RAM disk or the memory card. That is the drive that DOS commands will act on automatically if you don't specify otherwise).

Another often-used command is CLS, which stands for Clear Screen, which is what it does.

Once you're in DOS, you begin programs simply by typing their filenames. Programs are any file that ends with .EXE or .COM. Also, DOS has what are called batch files (ending with .BAT) that can be "run"

like programs, too. Batch files are actually lists of DOS commands.

Note that to run a program, you only need to type in the first part of the name, not the .EXE, .COM, or .BAT part. DOS will figure that part out for itself.

Many DOS programs require data files, too. It is usually important to store all of the data files in the same place that their program file is stored. See the instructions for the individual programs to find out whether this is a concern. If a program quits unexpectedly saying "file not found," then you may be missing an important data file.

To begin your internal applications from DOS, you have two choices. You may either hit the Atari key and the first letter of the name of the application (i.e. Atari-E for the editor), or you may type the word APP, then a /, then the first letter of the name of the application (i.e. APP /E for the editor). Then press ENTER.

Mostly, the word APP is more useful to people who write .BAT files. (For an example, load LAUNCH.BAT into your built-in editor and read it).

These few simple commands will guide you through most of what you need to know about DOS, enough so that you can get along without the bulky File Manager.

The future direction of this column will depend on your input! Please send questions to Re:Port, 1618 S. Beech Ct., Broken Arrow, OK 74012-6205.

Online Services

New Portfolio BBS areas; talking on GENie, CIS

Good news this time for Portfolio users with modems, especially if you live in Ohio, or if you have access to Telnet.

Cleveland Freenet is a service that supports many other computers, but luckily the Portfolio is included in that support.

Tony Thomas, the sysop of the Portfolio SIG says there is a "growing library with plenty of stuff to download."

A word of warning: In our looking around as a guest, we didn't find much to download for the Portfolio, although there were some good messages available.

Be prepared to sign up for membership to the SIG, therefore.

You are not required to pay for this membership, but there may be a wait while you are confirmed.

There are a few different ways to get into the Freenet and to the Portfolio area.

To dial it directly, call (216) 368-3888.

If you have Telnet access (if you have an account on a university computer, you probably have Telnet access), you can contact Freenet at the following addresses: 129.22.8.82, 129.22.8.75, 129.22.8.76, freenet-in-a.cwru.edu, freenet-in-b.cwru.edu, freenet-in-c.cwru.edu, cwns16.ins.cwru.edu, cwns9.ins.cwru.edu, or cwns10.ins.cwru.edu.

Enter the Freenet as a visitor and type GO PORT from the main menu to get to the Portfolio area.

Thomas also runs another Portfolio area on another BBS. This one is called TCP. Be prepared to send in a signed letter for access to TCP (you will download the letter online).

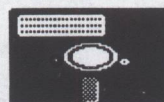
The number is (216) 228-7335.

In other online news, the GENie chats continue. Every Sunday night at 10 Eastern Time, users are invited to show up and talk about the Portfolio.

Unfortunately, the talks are not very heavily populated. However, that means that you have more of a chance to be an active participant in the conversation rather than a listener.

The talk also stays pretty close to the topic — the Port.

You can also download transcripts of the confer-



ON DISK

Catalogues of the new files available on CompuServe and GENie are available on your Re:Port Disk #4 in the \ONLINE directory.

CompuServe wants all Re:Port readers who aren't members to sign up now, so they've put forward a special offer to our subscribers.

You can get a sign-up kit and \$15 worth of free connect time by calling (800) 848-8199 (ask for Operator 198). Tell them that you heard about this from Re:Port, an APORTFOLIO forum member.

The \$15 free time offer is open only to people who do not yet have a membership.

ences within an hour after they end, so you can read what you missed.

As the host of the GENie conferences, Re:Port editor David E. Stewart offers a \$5 gift certificate to any person who comes to the Portfolio conferences for the first time.

It's a great way to make up for the amount you spend while you're online talking!

Once online to GENie, type m950;2 to get into the conference area.

And speaking of conferences, the folks who run CompuServe's Atari Portfolio Forum (GO APORTFOLIO) have broken new ground with the first ever 24-hour conference on any topic on CompuServe.

The Portfolio was honored with 24 hours of talk, including Portfolio programmers and people from Atari. And, every 15 minutes, prizes were given out to the highest electronic dice roller.

Prizes included memory cards, PC card drives, magazine subscriptions, programs, and just about everything you'd want for the Portfolio.

The sysops of the CompuServe Atari Portfolio Forum continue to find innovative ways to keep the Portfolio in the forefront of attention. They also have the largest collection of programs available for the Portfolio.

See the box above for more information on how you can subscribe to CompuServe as a Re:Port subscriber.

Advanced Programming

Atari drops non-disclosure; graphics programming

Good news for programmers! Atari has dropped the non-disclosure arrangement that has blocked the easy distribution of Portfolio programming information (see "Viewport," Issue #1).

That means that *Re:Port* will be able to discuss the internal factors that aid in Portfolio program development. So we're beginning a programming column that will delve into the depths of the Port.

In this issue, however, we'll focus mainly on a secret of Portfolio programming that you won't even find in what used to be the Top Secret technical reference manual: Graphics.

Sure, Portfolio graphics are covered in the technical reference manual, but only the slow way to do graphics. We'll discuss the super-fast way, a method that some programmers have used to display up to 20 frames of animated graphics every second!

The trick is to write directly to the LCD controller that displays the Port's graphics. You can do this with a simple bit of code (we'll write in the lowest common level, assembly language, so that everyone can translate this to their favorite higher-level language).

Before you start on any graphics code, though, you need to set the Port in graphics mode. This is done in the same way that you'd set up a graphics mode on a desktop IBM:

```
MOV AX,0004h
INT 10h
```

Here is the code that actually sends a byte of graphics information to the LCD controller:

```
MOV AL,0Ch
MOV DX,8011h
OUT DX,AL
MOV AL,graphic_to_send
DEC DX
OUT DX,AL
```

In that code fragment, "graphic_to_send" is a byte where each bit equals one pixel. A bit set to 1 turns on the pixel; a bit set to 0 turns off the pixel. The only trick is that the byte **must be reversed**. In other words, if you want to put up a graphic that consists of only a single pixel to the leftmost point, you'd normally think you'd have to put 128 in the graphic_to_send spot (10000000).

However, you actually need to write a 1 (00000001). Yes, Portfolio programming is backward!

Now, there's another factor to consider, which is where on the screen you want the pixel to be written.

There are 1920 bytes of graphics area on the Portfolio screen (240 rows by 64 columns of pixels = 1920 bytes). In order to place your byte of graphics information to any one of these bytes, you must send the LCD controller the location number (from 0 to 1919) of the byte you wish to send.

First, you have to come up with the code that figures out where you want to write the byte of graphics. Because this number will be larger than 255, you need to store it as a WORD type variable. Then, you need to separate a low-order byte and a high-order byte from that word. Now that you have all the information you need, here's the code you'll write to the controller:

```
MOV AL,0Ah
MOV DX,8011h
OUT DX,AL
MOV AL,low_order_byte
DEC DX
OUT DX,AL
MOV AL,0Bh
MOV DX,8011h
OUT DX,AL
MOV AL,high_order_byte
DEC DX
OUT DX,AL
```

Surprisingly, that is all there is to creating graphics on the Portfolio. Of course, the simple code above could be optimized for more speed, but that is enough to get us started for now.

By the way, before we go, we should reset the Port to text mode:

```
MOV AX,0003h
INT 10h
```

In the next issue, we'll take a look inside the 60View program to see how it works its graphics magic.

If you have any questions or comments (or if you write an incredible program that you'd like to share), please contact us at *Re:Port*, Programming Column, 1618 S. Beech Ct., Broken Arrow, OK 74012-6205.

Contest

Next winner will be a better speller, instantly

Congratulations to Judy Wadsworth of Livermore, CA, who is the winner of our last contest. She will receive the Terminator 2 Special Edition Card.

(For those of you who didn't win, you may order your own copy of the T2 card from Atari for \$20).

Let's move on to our next contest. This month's prize is Instant Speller, on ROM disk from Atari. For a review of this product, see page 6.

To enter the contest, please fill out the accompanying form (or a copy) and send it to Re:Port, 1618 S. Beech Ct., Broken Arrow, OK 74012-6205. Contest deadline is April 15. Only one entry is allowed per person, and only paid one-year subscribers may enter.

The information on the form is vital for us to help decide what changes to make in future issues.

Name: _____

Favorite use of the Portfolio: _____

Favorite application (pick two):

Editor Worksheet Address Book

Diary Calculator

New program I'd like to see: _____

Program update I'd like to see: _____

Looking ahead . . .

Port boldly goes where no palmtop has gone before

What's ahead for the Atari Portfolio? To find out, we have to look across the ocean to Distributed Information Processing (DIP) in England, the original designers of the Portfolio (they call it the Pocket PC over there).

The most exciting new development for the Portfolio from DIP is the PCMCIA adapter. PCMCIA, or Personal Computer Memory Card International Association, is a memory card standard.

In addition to memory cards, PCMCIA cards can include devices such as modems.

Soon, we may see a modem that you can slide into the card drive of the Portfolio!

No news yet on how much the adapter will cost, when it will be

available in the US, or how big it will be. We'll keep you posted. According to the PCMCIA standard, the cards can hold up to 64 megabytes of memory (4 megabyte cards actually exist today).

According to Atari, the following products will be available sometime in the future: Astrologer, Bridge Baron, Stock Tracker, Wine Companion, and U.S. Traveller's Guide.

If any of these products interest you (Editor's note: The traveller's guide, which should include information on major cities, sounds intriguing to me!), let Atari know.

Their address is 1196 Borregas Ave., Sunnyvale, CA 94089.

The Portfolio may not be as powerful as the computer aboard the USS Enterprise, but it may be going

to space soon, according to the newsletter DIP Update: "The distribution of blood and air inside a human body clearly undergoes some significant changes under conditions of weightlessness, and to investigate those changes, a team at a hospital in Sheffield and the Institute for Biomedical Equipment Evaluation and Services have developed a miniature imaging system using the [Portfolio] to store data on a memory card to be returned to earth for analysis."

DIP Update is a four-page newsletter suggesting business uses for the Portfolio. To get a copy, write to Distributed Information Processing Limited, FREEPOST Surrey Research Park, Guildford Surrey GU2 5BR ENGLAND.

DOS to Port

Adventure games are more Port-able

Some great programs for DOS computers will work on the Port.

The best new release for adventure game players is "The Lost Treasures of Infocom" by Activision. Included in the package are 20 adventure games from Infocom.

Excitingly, 12 of those 20 games will fit on a 128K card. And added to that, they include a utility to let you set up the program to run on a 40-by-8 screen. And they work well.

There are only two bad points: 1. Each program takes up an entire 128K RAM card, and 2. If you want

to save your game, you need to free up about 12K of space on your internal C: drive.

If you think that is too much to sacrifice, stayed tuned to Atari. Recently, it was rumored that the classics of adventure gaming, Zork I, II, and III, will be distributed on a single ROM card! Of course, we'll keep you up to date on that.

The games from Infocom that will run on the Portfolio with a 128K RAM card are: Zork I, Zork II, Zork III, Starcross, Infidel, Witness, Suspended, Deadline, Sorcerer,

Planetfall, Enchanter, and Suspect.

Unfortunately, some games such as Hitchhiker's Guide have been rewritten, and the newer versions (which are included in the "Lost Treasures" package) won't run on the Port because of their size.

"The Lost Treasures of Infocom" sells for around \$59 at computer stores.

In future DOS to Port columns, we'll get away from games and look at some common DOS utilities that you can use every day on the Portfolio.

Services

Get fast shipping, custom programs, wide release

Re:Port provides many other services to its subscribers other than the newsletter.

Check out the Savings Surge flier for information on how you can save on Atari products for the Portfolio. Note that shipping is free via Parcel Post, which can take four to six weeks.

However, UPS 2nd-Day air shipping is available. Because of a UPS price increase, we must now ask for a \$7.00 an item extra charge for the 2nd-Day air service. We cannot deliver via UPS to P.O. Boxes, so please provide a street address if your Re:Port address on file is a P.O. Box.

If you know someone who would like a Portfolio, we offer a complete Port set for only \$350: A Portfolio,

a 64K RAM card, a Parallel Interface, and a year of Re:Port. You will receive a \$5 gift certificate, too!

Also, Re:Port provides all of its subscribers free customer support via the telephone or online with two major services. Contact us at (918) 258-2062 between 1 p.m. and 7 p.m. central time Monday through Friday, or anytime at 73770,2021 on CompuServe or at the address DAVESTEWART on GENie.

If you need a special program written for the Portfolio, Re:Port offers custom programming services. Please contact us at the above phone number, or write to Re:Port, Custom Programming, 1618 S. Beech Ct., Broken Arrow, OK 74012-6205. We will discuss your program needs and set up an hourly

rate schedule and deadline for the complete project.

Or, if you are a programmer and would like more exposure to Portfolio users, send your program on a disk to Re:Port, and we will consider placing it on our disk that we send to every subscriber. You must include full documentation on disk. Be sure to put your address in the documentation so our readers can contact you.

We will accept only virus-free programs, and your program must be either a complete package or a working demo that includes ordering information. No shareware or crippled software will be accepted. Send your disks to the Re:Port address, to the attention of Third Party Support.